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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,163	10/31/2003	Jin-Ichi Mashiyama	A36068 - 070793.0153	1605
21003	7590	08/23/2004	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			HYEON, HAE M	
			ART UNIT	PAPER NUMBER
			2839	

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/699,163	Applicant(s) MASHIYAMA ET AL.	
	Examiner Hae M Hyeon	Art Unit 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: “38” recited in the paragraph [0024], lines 7-8. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: In the paragraph [0037], line 11, “Fig. 1” should be -- Fig. 2 --.

Appropriate correction is required.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

4. Claim 1 is objected to because of the following informalities: Claim 1, line 3, it seems that “grand contacts” should be -- ground contacts --.

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Appropriate correction is required.

5. Claim 2 recites the limitation "the fitting side" in lines 2-3, "the connecting side" in line 3, and "the fitting side" in line 8. There is insufficient antecedent basis for these limitations in the claim. Also, claims 4 and 6 have the same problem.

6. Claims 4, 5, 11, 13 and 15 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 6, 7, 12, 14 and 16, respectively. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim 4, line 3 recites, "the two pin contacts," while claim 6, line 3 recites, "a plurality of the pin contacts." Claim 5, line 2 recites, "pairs of said contact;" line 3 recites, "said pin contacts;" and line 4 recites, "two pairs of pin contacts." Claim 7, line 2 recites, "sets of said contact;" line 3 recites, "said pairs of pin contacts;" and line 4 recites, "two sets of said pin contacts." Since "a plurality of the pin contacts" and "sets of said contact" are broader than "two pin contacts" and "two pairs of pin contacts" claims 6 and 7 are broader than claims 4 and 5. Thus, all the limitations recited in claims 4 and 5 are included in claims 6 and 7. Furthermore, claims 11, 13, and 15 depended on claim 4 are duplicated claims of claims 12, 14, and 16 depended on claim 6

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Andrews et al (5,743,765).

Andrews discloses an electrical connector comprising a pin connector and a socket connector of many different types. Andrews teaches that a socket connector 1 is formed from an insulating material and is coated with metal layers 11, 12, but not in the cavities 5, 6 for a terminal 14. Also, Andrews teaches that a pin connector 24 and a socket connector 23 in Figure 6 are provided with metal layers 25, 26. In Figure 9a-9c, Andrews teaches a pin connector 50 and a socket connector 53, each having ground contacts 57, 59.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andrews et al in view of Billman (6,435,913 B1) and Mizumura et al (US 2004/0005815 A1).

Andrews discloses a socket connector 23 having grooves 33 formed around the contact insertion aperture 32, which are metallized. Also, Andrews discloses grooves formed around ground contacts 57 and 59, which are metallized (see Figs. 9a-9c). However, Andrews does not disclose grooves formed in a block of a pin connector.

Billman discloses an electrical connector 2 comprising a pin connector with a block 4 having a plurality of cross-shaped grooves 54 on a connecting side to a board 52 such that the grooves 54 divides contact insertion apertures 58 in a pair (see Fig. 6). Although, Billman use a first shields 8 and a second shield 10, instead of metallizing the grooves 54, the first and second shields 8 and 10 surround the pair of the contact insertion apertures 58 to provide shielding to the pair of contacts. The metallizing grooves and the shields in grooves are two different methods to provide shielding in a connector.

Mizumura discloses an electrical connector 10 comprising a socket connector having grooves 15 and 140-145 in cross-shape. Like Billman, Mizumura uses a horizontal shield plate 14 and a vertical shield plate 27 placed in the grooves 15 and 140-145 to surround the contact insertion apertures 19 to provide shielding to the contacts.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the connector taught by Andrews such that it would have a plurality of shielded grooves around contact insertion apertures as taught by Billman and Mizumura to provide shielding to each contact.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,293,827 B1 by Stokoe, US Patent No. 6,471,548 B2 by Bertoncini et al., US Patent No. 6,540,558 B1 by Paagman, US Patent No. 6,544,072 B2 by Olson, US Patent No. 6,572,410 B1 by Volstorf et al., US Patent No. 6,579,124 B1 by Vanbesien, US Patent No. 6,609,933 B2 by Yamasaki, and US Patent No. 6,652,318 B1 by Winings et al.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hae M Hyeon whose AU is 2839 and whose telephone number is (571) 272-2093. The examiner can normally be reached on Mon.-Fri. (8:30-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tulsidas C. Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any response to this action may be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

For additional information regarding this new address, which was effective May 1, 2003, see *Correspondence with the United States Patent and Trademark Office*, 68 Fed. Reg. 14332 (March 25, 2003).

Hae M Hyeon

Examiner

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hnh

hnh

Hae Moon Hyeon